

Fig.1

2/16

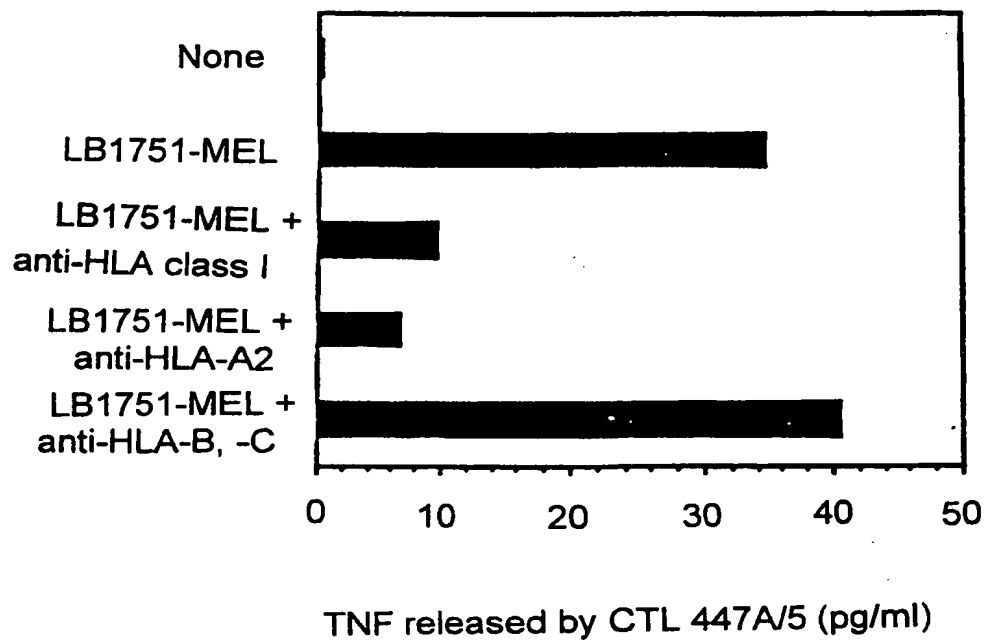
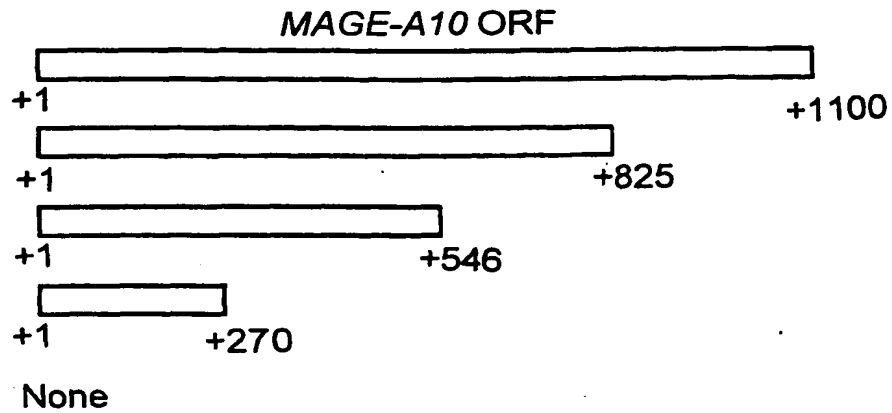
Stimulator cells

Fig. 2

3/16

Sequence cotransfected with HLA-A2.1



TNF released by CTL 447A/5 (pg/ml)

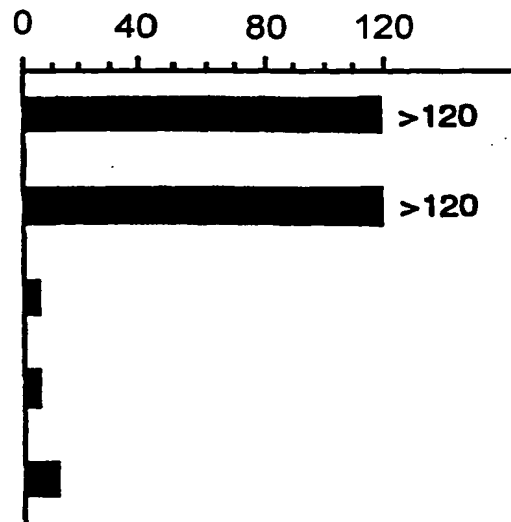
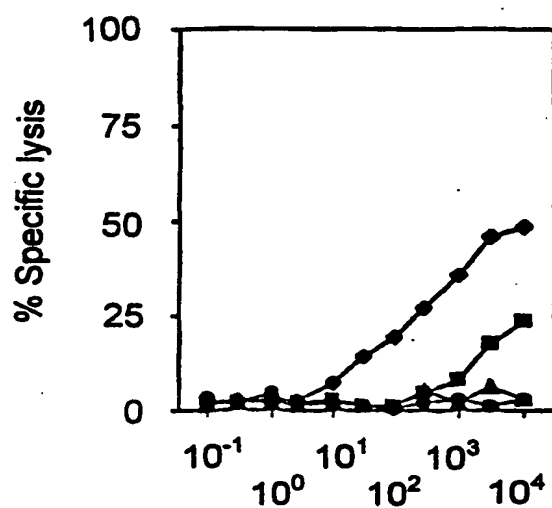


Fig. 3

4/16

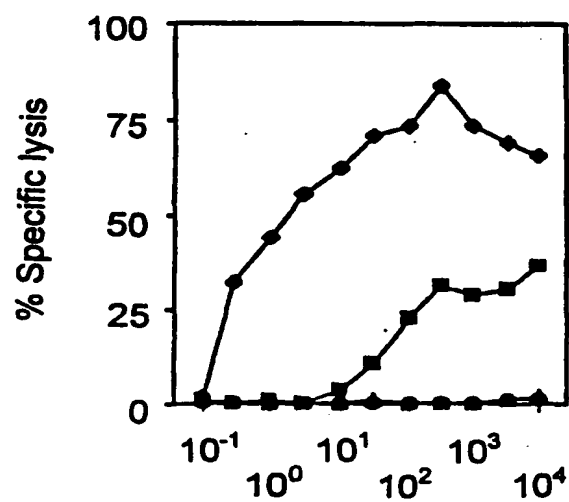
Fig. 4a



Peptide concentration (nM)

- CMLLVFGIDV(182 - 191)
- ▲ MLLVFGIDV(183 - 191)

Fig. 4b



Peptide concentration (nM)

- GLYDGMEHL(254 - 262)
- GLYDGMEHLI(254 - 263)

5/16

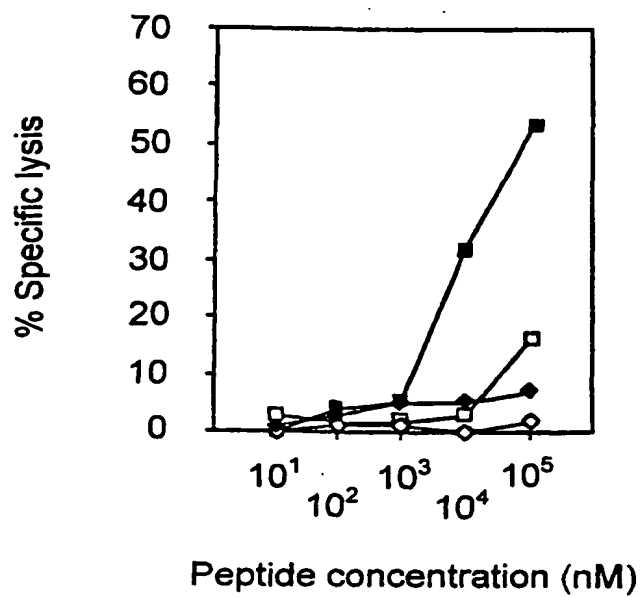


Fig. 5

- GLYDGREHS (No Ab)
- GLYDGREHS (MA2.1)
- ◇ GLYDGREHSV (No Ab)
- ◆ GLYDGREHSV (MA2.1)

6/16

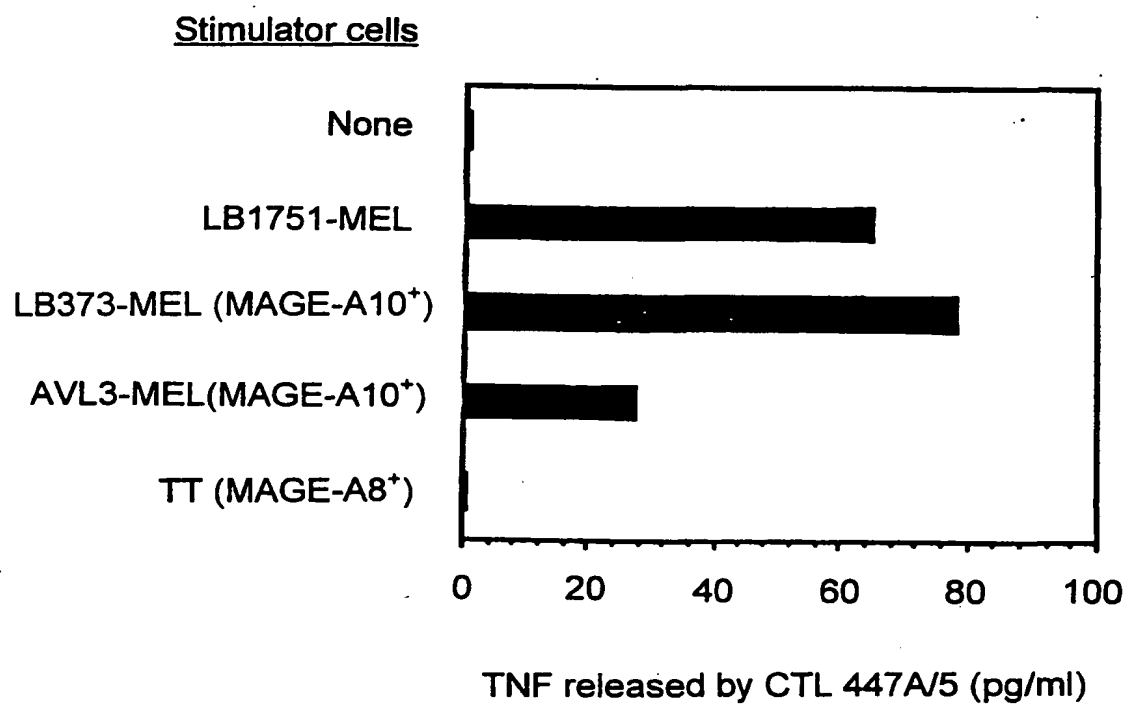


Fig. 6

## SEQ ID NO. 1

MPRAPKRQRCMPEEDLQSQSETQGLEGAQAPLAVEEDASSSTSTSSSFPSFPSSSSSSSSSSCYPLIPS  
TPEEVSADDETPNPPQSAQIACSSPSVVASLPLDQSDGSSSQKEESPSTLQVLPDSESLPRSEIDEKV  
TDLVQFLLFKYQMKEPITKAEILESVIKNYEDHFLLFSEASECMLLVFGIDVKEVDPTGHSFVLVTS  
GLTYDGMLSDVQSMPKTGILILILSIIFIEGYCTPEEVIWEALNMMGLYDGMELIYGEPRKLLTQDWV  
QENYLEYRQVPGSDPARYEFLWGPRAHAEIRKMSLLKFLAKVNGSDPRSFPPLWYEEALKDEEERAQDRI  
ATTDDTTAMASASSSATGSFSYPE

Fig. 7

09856812-090701

8/16

## SEQ ID NO. 2

MLLGQKSQRYKAE EGLQAQGEAPGLMDVQIPTAEEQKAASSSSTLIMGTLEEVTDSGSPSPPPQSPEGAS  
SSLTVTDSTLWSQSDEGSSSNEEGPSTSPDPAHLESLFREALDEKVAELVRFLLRKYQIKEPVTKAEM  
LESVIKNYKNHFPDIFSKASECMQVIFGIDVKEVDPAGHSYILVTCLGLSYDGLLGDDQSTPKTGLLII  
VLGMILMEGSRAPEEAIWEALSVMGAV

Fig. 8

09856812-090701



9/16

Fig. 9

SEQ ID NO. 3

1 cagggagatg gtggcttttg cgtgcaagac ccatacacga ttcagcagga gggaaaggct  
61 gggctgtcgg gagtaaactt gaatacctgg aggacaccca aataaaggaa gtccccgtct  
121 tgtccccctc cctgcccac ccccccccc ccccccgcca aatgtctgct ccttctgtca  
181 gctttgggaa tcccatgcag gtgtgatcgt gtggtgcccc tccccacttc tgcctgcccg  
241 gtctcagggg ggtgaggacc ttggtctgag ggttgctaag aagttattac agggttccac  
301 acttggtcaa cagagggagg agtcccagaa tctgcaggac ccaaggggtg ccccttagt  
361 gaggactgga ggtacctgca gccagaaaag aagggatgtc acagagtctg gctgtccct  
421 gttcttagct ctgaggggac ctgatcagga ttggcactaa gtggcaagct caattttacc  
481 acaggcagga agatgaggaa ccctcaggga aatggagtgt tgggtgtaag gggagatatc  
541 agccctggac accccacagg gatgacagga tgtggctcct tcttactttt gttttggaat  
601 ctcagggagg tgagaacctt gctctcagag ggtgactcaa gtcaacacag ggaaccctc  
661 ttttctacag acacagtggg tgcgagatc tgacaagagt ccaggtaagg aacctgagg  
721 aaatctgagg gtacccccag ccataaacac agatggggtc cccacagaaa tctgccatga  
781 ccctactgtc actctggaga acccagtcag ggctgtccgc tgagtctccc tgtcttatac  
841 aaggatcact ggtctctggg agggagagggt gttggtctaa gggagctgca ctcggtcag  
901 cagagggagg gtcccagacc ctgccaggag tcaaggtgag gactgagggg acaccattct  
961 ccaaacgcac aggactcagc cccaccctac cccttctgtc agccacggga attcatggg  
1021 aactgggggt agatggactc ccctcacttc ctctttccat gtctcctgga ggtaggacct  
1081 tgggttaagg aagtggcctc agatcaacaa agggagggtc ccaggctcgt ttaggcatca  
1141 agaagaggac caagcaggct cctcacccca gtacacatgg acccagctga atatggccac  
1201 ctcttgctgt cttttctggg aggacctctg cagttgtggc cagatgtggg tccccctatg  
1261 tcttctatct cgtatcaggg atgtaagctt ttgatctgag agtttcttag accagcaaag  
1321 gagcagggtc taggcttttc caggagaaaag gtgagagccc cagctgagca cagaggctcc  
1381 ccaccccagg gtagtgggga actcacagag tccagcccac cctcctgaca acactgggag  
1441 gctggggctg tgcttgagc ctgaacctg agggccctc aattcctct ttaggtcaca gagcagaaag  
1501 cagggactgt gaggtgaggc ctgtgtctaa ggcagtgtt ttaggtgccc tgaatgtgta ccaagggcc  
1561 ggccagaca gtgccaagg aggacaaagt ggaccccact gcatcagctc cacctacct actgtcagtc  
1621 cacctgtccc ctggagcctt ggcctctgcc ggctgcatcc tgaggagcca tctctcact ccttcttcag  
1681 gttctcaggg gacagggaga gcaagagggtc aagagctgtg ggacaccaca gagcagcact  
1741 gaaggagaag acctgtaagt tggcctttgt tagaacctcc aggggtgtgt tctcagctgt  
1801 ggccacttac acctccctc tctcccagg cctgtgggtc cccatcgccc aagtcctgcc  
1861 cactctcca cctgctacce tgatcagagt catcatgcct cgagctccaa agcgtcagcg  
1921 ctgcatgcct gaagaagatc ttcaatccca aagtgagaca cagggcctcg aggggtgcaca  
1981 ggtccctctg gctgtggagg aggatgcttc atcatccact tccaccagct cctcttttcc  
2041 atcctctttt ccctcctcct cctcttctc ctcctcctcc tgctatcctc taataccaag  
2101 caccacagag gaggtttctg ctgatgatga gacaccaaat cctccccaga gtgctcagat  
2161 agcctgtctc tccccctcgg tcgttgett ccttccatta gatcaatctg atgagggtc  
2221 cagcagccaa aaggaggaga gtccaagcac cctacagggtc ctgccagaca gtgagtctt  
2281 acccagaagt gagatagatg aaaagggtgac tgatttggtg cagtttctgc tcttcaagta  
2341 tcaaatgaag gagccgatca caaaggcaga aatactggag agtgtcataa aaaattatga  
2401 agaccacttc cctttgttgt ttagtgaagc ctccgagtgc atgctgctgg tctttggcat  
2461 tgatgtaaa gaaagtggat ccactggcca ctctttgtc cttgtcacct ccctgggct  
2521 cacctatgat gggatgctga gtgatgtcca gagcatgcc aagactggca ttctcact  
2581 tatcctaagc ataacttca tagagggtc ctgacccct gaggaggta tctgggaagc  
2641 actgaatat atgggctgt atgatgggat ggagcacctc atttatggg agccaggaa  
2701 gctgctcacc caagattggg tgcaggaaaa ctacctggag taccggcagg tgcctggcag  
2761 tgatcctgca cggatgagt ttctgtggg tccaagggt catgctgaaa ttaggaagat  
2821 gagtctctg aaatttttg ccaaggtaaa tgggagtgat ccaagatcct tccactgtg  
2881 gtatgaggag gctttgaaag atgaggaaga gagagcccag gacagaattg ccaccacaga

10/16

3001 tgatactact gccatggcca gtgcaagttc tagcgctaca ggtagcttct cctaccctga  
3061 ataaagtaag acagattctt cactgtgttt taaaaggcaa gtcaaatacc acatgatttt  
3121 actcatatgt ggaatctaaa aaaaaaaaaa aaaaaagttg gtatcatgga agtagagagt  
3181 agagcagtag ttacattaca attaaatagg aggaataagt tctagtgttc tattgcacag  
3241 taggatgact atagttaaca ttaagatatt gtatattaca aaacagctag aaggaaggct  
3301 tttcaatatt gtcaccaaaa agaaatgata aatgcatgag gtgatggata cactacctga  
3361 tttgatcatt atactacata tacatgaatc agaacatcaa attgtacctc ataaatatct  
3421 acaattacat gtcagttttt gtttatgttt ttgttttttt ttaatttatg aaaacaaatg  
3481 agaatggaaa tcaatgatgt atgtggtgga

Fig. 9 continued

11/16

SEQ ID NO. 4

Fig. 10a

TCCGGGGTCG	CTCGAGCCGG	CCGGGACTCG	GGGATCASAA	GTAACGGCGG	50
YYMKYGTKCT	GAGGGACAGG	CTTGAGATCG	GCTGAAGAGA	GCGGGCCCAG	100
GCTCTGTGAG	GAGGCAAGGG	AGGTGAGAAC	CTTGCTCTCA	GAGGGTGACT	150
CAAGTCAACA	CAGGGAACCC	CTCTTTTCTA	CAGACACAGT	GGGTCGCAGG	200
ATCTGACAAG	AGTCCAGGTT	CTCAGGGGAC	AGGGAGAGCA	AGAGGTCAAG	250
AGCTGTGGGA	CACCACAGAG	CAGCACTGAA	GGAGAAGACC	TGCCTGTGGG	300
TCCCCATCGC	CCAAGTCCTG	CCCACACTCC	CACCTGCTAC	CCTGATCAGA	350
GTCATCATGC	CTCGAGCTCC	AAAGCGTCAG	CGCTGCATGC	CTGAAGAAGA	400
TCTTCAATCC	CAAAGTGAGA	CACAGGGCCT	CGAGGGTGCA	CAGGCTCCCC	450
TGGCTGTGGA	GGAGGATGCT	TCATCATCCA	CTTCCACCAG	CTCCTCTTTT	500
CCATCCTCTT	TTCCCTCCTC	CTCCTCTTCC	TCCTCCTCCT	CCTGCTATCC	550
TCTAATACCA	AGCACCCCAG	AGGAGGTTTC	TGCTGATGAT	GAGACACCAA	600
ATCCTCCCCA	GAGTGCTCAG	ATAGCCTGCT	CCTCCCCCTC	GGTCGTTGCT	650
TCCCTTCCAT	TAGATCAATC	TGATGAGGGC	TCCAGCAGCC	AAAAGGAGGA	700
GAGTCCAAGC	ACCCTACAGG	TCCTGCCAGA	CAGTGAGTCT	TTACCCAGAA	750
GTGAGATAGA	TGAAAAGGTG	ACTGATTTGG	TGCAGTTTCT	GCTCTTCAAG	800
TATCAAATGA	AGGAGCCGAT	CACAAAGGCA	GAAATACTGG	AGAGTGTCAT	850
AAAAAATTAT	GAAGACCACT	TCCCTTTGTT	GTTTAGTGAA	GCCTCCGAGT	900
GCATGCTGCT	GGTCTTTGGC	ATTGATGTAA	AGGAAGTGGA	TCCCACTGGC	950
CACTCCTTTG	TCCTTGTCAC	CTCCCTGGGC	CTCACCTATG	ATGGGATGCT	1000
GAGTGATGTC	CAGAGCATGC	CCAAGACTGG	CATTCTCATA	CTTATCCTAA	1050
GCATAATCTT	CATAGAGGGC	TACTGCACCC	CTGAGGAGGT	CATCTGGGAA	1100
GCACTGAATA	TGATGGGGCT	GTATGATGGG	ATGGAGCACC	TCATTTATGG	1150
GGAGCCCAGG	AAGCTGCTCA	CCCAAGATTG	GGTGCAGGAA	AACTACCTGG	1200
AGTACCGGCA	GGTGCCCTGGC	AGTGATCCTG	CACGGTATGA	GTTTCTGTGG	1250
GGTCCAAGGG	CTCATGCTGA	AATTAGGAAG	ATGAGTCTCC	TGAAATTTTT	1300
GGCCAAGGTA	AATGGGAGTG	ATCCAAGATC	CTTCCCACTG	TGGTATGAGG	1350
AGGCTTTGAA	AGATGAGGAA	GAGAGAGCCC	AGGACAGAAT	TGCCACCACA	1400
GATGATACTA	CTGCCATGGC	CAGTGCAAGT	TCTAGCGCTA	CAGGTAGCTT	1450
CTCCTACCCT	GAATAAAGTA	AGACAGATTC	TTCCTGTGT	TTTAAAAGGC	1500
AAGTCAAATA	CCACATGATT	TTACTCATAT	GTGGAATCTA	AAAAAAAAAA	1550
AAAAAAAAGT	TGGTATCATG	GAAGTAGAGA	GTAGAGCAGT	AGTTACATTA	1600
CAATTAAATA	GGAGGAATAA	GTTCTAGTGT	TCTATTGCAC	AGTAGGATGA	1650
CTATAGTTAA	CATTAAGATA	TTGTATATTA	CAAACAGCT	AGAAGGAAGG	1700
CTTTTCAATA	TTGTCACCAA	AAAGAAATGA	TAAATGCATG	AGGTGATGGA	1750

SUBSTITUTE SHEET (RULE 26)

09556812-090701

12/16

0856812-090701

TACACTACCT	GATGTGATCA	TTATACTACA	TATACATGAA	TCAGAACATC	1800
AAATTGTACC	TCATAAATAT	CTACAATTAC	ATGTCAGTTT	TTGTTTATGT	1850
TTTTGTTTTT	TTTAAATTTA	TGAAAACAAA	TGAGAATGGA	AATCAATGAT	1900
GTATGTGGTG	GAGGGCCAGG	CTGAGGCTGA	GGAAAATACA	GTGCATAACA	1950
TCITTGTCTT	ACTGTTTTCT	TTGGATAACC	TGGGGACTTC	TTTTCTTTTC	2000
TTCTTGGTAT	TTTATTTTCT	TTTTCTTCTT	CTTCTTTTTT	TTTTTTAACA	2050
AAGTCTCACT	CTATTGCTCT	GGCAGGAGTG	CAGTGGTGCA	GTCTCGGCTC	2100
ACTGCAACTT	CCGCCTCCTG	GGTTCAAGCG	ATTCTCCTGC	CTCAGTCTCC	2150
TGAGTAGCTG	GGATTACAAG	TGTGCACCAC	CATACCCGGC	TAATTTTGTA	2200
TTTTTTAGTA	GAGATGGGGT	TTCACCATGT	TGGCCAGGCT	GGTCTCAAAC	2250
TCCTGACCTC	AGGTAATCTG	CCCGCCTCAG	CCTCCCAAAG	TGCTGGGATA	2300
ACAGGTGTGA	GCCCACTGCA	CCCCAGCCTC	TTCTTGGTAT	TTTAAAATGT	2350
TGTTACTTTT	ACTAGAATGT	TTATGAGCTT	CAGAATCTAA	GGTCACACGT	2400
TCGTTTCTGT	TTATCCAGTT	TAAGAAACAG	TTTTGCTATT	TTGTAAAACA	2450
AATTGGGAAC	CCTTCCATCA	TATTTGTAAT	CTTTAATAAA	ATAACATGGA	2500
ATTGGAATAG	TAATTTTCTT	GGAAATATGA	AAAAATAGTA	AAATAGAGAA	2550
AATAATTTT					2559

Fig. 10b

Fig. 11a

SEQ ID NO. 5

BEST AVAILABLE COPY

1 agtctcagat cactggagag aggtgcccc gagcccttaa ggaggactca gcagacctcc  
61 catcatggcc taggaaacct gctcccactc tcaggtctgg gcaccaagg caggacagtg  
121 gggaagggat gtggcccccc cactttctgg taggggggcc tcaaggagat ggtggccttg  
181 gcatgcaaga cacatccacg gttcagcagg aaggaaaggg ccatgccttg tcgtggagta  
241 aatatgaata cctggatgac acccagacag agaaagaccc catgaaacct actacttctg  
301 tcagccgtgg gaatcccatg cagggttgtc catgtagtgc ctccttactt ctgcctcctg  
361 ggtctcaggg aggtagcaac ctgggtctga agggcgctc cagctcagca gagggagcca  
421 cacctgttca acagaggac ggggtcacag gatctgcagg acccaagatg tgctcacttt  
481 gtgatgaatg ggggtactcc tggcctggaa agaagggacc ccacaaagtc tggctaactt  
541 tggttattat ctctggggga acccgatcaa ggggtggcct aagtggagat ctcatctgta  
601 ctgtgggcag gaagttgggg aaacgcagga agataaggtc ttgggtgtaa ggggagatgt  
661 ctgctcatat cagggtgttg tgggttgagg aaggcgggc tccatcaggg gaaagatgaa  
721 taacccctg aagacctag aaccaccac tcaagaacaa gtagggacag atcctagtgt  
781 caccctgga caccaccac agtggctcag agatgtggtg gctcctcatt tctctcttga  
841 gtctcaggga agtgaggacc ttgttctcag agggcaactc aggacaaaac agggaccccc  
901 atgtgggcaa cagactcagt ggtccaagaa tctaccaaga gtctaggtga caacactgag  
961 ggaagattga gggtagcctc gatgggtctc ctagcaggca aaaaacagat gggggcccaa  
1021 cagaaatctg cccggcctct tttgtcacc ctgagagcat gaggcaggat atcagctgag  
1081 gcccctgtgt tataccagac tcattgggtc cagggagaag aaggccttgg tctgagggca  
1141 ctgcattcag gtcagcagag cgggggtcca agggcctgac agggagtcagg gactcagagg  
1201 acaccactca ccaaacacac aggaccgaac cccaccctgc accttctgtc agccatggga  
1261 agtgcaggga aaggtgggtg gatggaatcc cctcatttgc tcttccagtg tctcctggag  
1321 ataggtcctt ggattaagga agtggcctca ggtcagccca ggacacatgg gccccaatgt  
1381 attttgtgta gctattgctt ttttctcacc ctaggacaga cacgtgggccc ccattgcatt  
1441 ttgtgtagct attgcttttt tcccaggagg ccttgggcat gtggggccag atgtgggtcc  
1501 cttcatatcc ttgtcttcca tatcagggat ataaactctt gatctgaaag tttctcaggc  
1561 cagcaaaagg gccagatcca ggccctgcca ggagaaagat gaggggccctg aatgagcaca  
1621 gaaaggacca tccacacaaa atagtgggga gctcacagag tcagggtcac cctcctgaca  
1681 gcaactgggt gctggggctg tgcttgaggt ctgcagcctg agttccctc gatttatctt  
1741 ctaggagctc caggaaccag gctgtgaggt cttggtctga ggcagtatct tcaatcacag  
1801 agcataagag gccagggcag tagtagcagt caagctgagg tgggtgttcc cctgtatgta  
1861 taccagaggc cctctgggca tcagaacagc aggaacccca cagttcctgg ccctaccagc  
1921 ccttttgtca gtcctggagc cttggccttt gccaggaggc tgcaccctga gatgccctct  
1981 caatttctcc ttcagggttcg cagagaacag gccagccagg aggtcaggag gccccagaga  
2041 agcactgaag aagacctgta agtagacctt tgtagggca tccagggtgt agtaccagc  
2101 tgaggcctct cacacgcttc ctctctcccc aggcctgtgg gtctcaattg cccagctccg  
2161 gccacactc tctgtctgcc ctgacctgag tcatcatgct tcttgggagc aagagttagc  
2221 gctacaaggc tgaggaaggc cttcaggccc aaggagaggc accagggctt atggatgtgc  
2281 agattccac agctgaggag cagaaggctg catcctcctc ctctactctg atcatgggaa  
2341 cccttgagga ggtgactgat tctgggtcac caagtcctcc ccagagtcct gagggtgctt  
2401 cctcttcctt gactgtcacc gacagcactc tgtggagcca atccgatgag ggttccagca  
2461 gcaatgaaga ggaggggcca agcacctccc cggacccagc tccctgttcc aaatatcaaa  
2521 gggaagcact tgatgagaaa gtggctgagt tagttcgttt cctgctccgc aatatcaaa  
2581 ttaaggagcc ggtcacaaag gcagaaatgc ttgagagtgt catcaaaaat tacaagaacc  
2641 actttcctga tatcttcagc aaagcctctg agtgcatgca ggtgatcttt ggcattgatg  
2701 tgaaggaggt ggacctgccc ggccactcct acatccttgt cacctgcctg ggcctctcct  
2761 atgatggcct gctgggtgat gatcagagta cgcccaagac cggcctcctg ataatcgtcc

14/16

2821 tgggcatgat cttaatggag ggcagccgag ccccgaggga ggcaatctgg gaagcattga  
2881 gtgtgatggg ggctgtatga tgggagggag cacagtgtct attggaagct caggaagctg  
2941 ctcacccaag agtgggtgca ggagaactac ctggagtacc gccaggcgcc cggcagtgat  
3001 cctgtgcgct acgagttcct gtgggggtcca agggcccttg ctgaaaccag ctatgtgaaa  
3061 gtcctggagc atgtgggtcag ggtcaatgca agagttcgca tttcctaccc atccctgcat  
3121 gaagaggctt tgggagagga gaaaggagtt tgagcaggag ttgcagctag ggccagtggg  
3181 gcagggttggt ggagggcctg ggccagtgca cgttccaggg ccacatccac cactttccct  
3241 gctctgttac atgaggccca ttcttcactc tgtgtttgaa gagagcagtc acagtcttca  
3301 gtagtgggga gcatgttggg tgtgaggga cacagtgtgg accatctctc agttcctggt  
3361 ctattgggag atttgagggt ttatctttgt ttccttttgg aattggtcca atgttccttc  
3421 taatggatgg tgtaatgaac ttcaacattc attttatgta tgacagtaga cagacttact  
3481 gctttttata tagtttagga gtaagagtct tgcttttcat ttatactggg aaacccatgt  
3541 tattttcttga attcagacac tacaagagca gaggattaag gtttttttag aaatgtgaaa  
3601 caacatagca gtaaaataca tgagataaag acataaagaa attaaacaat agttaattct  
3661 tgccttacct gtacctctta gtgtacccta tgtacctgaa tttgcttggc ttctttgaga  
3721 atgaaattga attaaatatg aataaataag tccccctgct cactggctca ttttttccca  
3781 aaatattcat tgagcttccg ctatttgga ggccctgggt tagtattgga gatgctaca

Fig. 11b

15/16

SEQ ID NO. 6

GAGCTCCAGG AACCAGGCTG TGAGGTCTTG GTCTGAGGCA GTATCTTCAA 50  
 TCACAGAGCA TAAGAGGCCC AGGCAGTAGT AGCACTCAAG CTGAGGTGGT 100  
 GTTCCCTCTG TATGTATACC AGAGGCCCTT CTGGCATCAG AACAGCAGGA 150  
 ACCCCACAGT TCCTGGCCCT ACCAGCCCTT TTGTCACTCC TGGAGCCTTG 200  
 GCCTTTGCCA GGAGGCTGCA CCCTGAGATG CCCTCTCAAT TTCTCCTTCA 250  
 GGTTCGCAGA GAACAGGCCA GCCAGGAGGT CAGGAGGCCC CAGAGAAGCA 300  
 CTGAAGAAGA CCTGTAAGTA GACCTTTGTT AGGGCATCCA GGGTGTAGTA 350  
 CCCAGCTGAG GCCTCTCACA CGCTTCCTCT CTCCCCAGGC CTGTGGGTCT 400  
 CAATTGCCCA GCTCCGGCCC ACACCTCTCT GCTGCCCTGA CCTGAGTCAT 450  
 C 451  
 ATG CTT CTT GGG CAG AAG AGT CAG CGC TAC AAG GCT GAG GAA 493  
 GGC CTT CAG GCC CAA GGA GAG GCA CCA GGG CTT ATG GAT GTG 535  
 CAG ATT CCC ACA GCT GAG GAG CAG AAG GCT GCA TCC TCC TCC 577  
 TCT ACT CTG ATC ATG GGA ACC CTT GAG GAG GTG ACT GAT TCT 619  
 GGG TCA CCA AGT CCT CCC CAG AGT CCT GAG GGT GCC TCC TCT 661  
 TCC CTG ACT GTC ACC GAC AGC ACT CTG TGG AGC CAA TCC GAT 703  
 GAG GGT TCC AGC AGC AAT GAA GAG GAG GGG CCA AGC ACC TCC 745  
 CCG GAC CCA GCT CAC CTG GAG TCC CTG TTC CGG GAA GCA CTT 787  
 GAT GAG AAA GTG GCT GAG TTA GTT CGT TTC CTG CTC CGC AAA 829  
 TAT CAA ATT AAG GAG CCG GTC ACA AAG GCA GAA ATG CTT GAG 871  
 AGT GTC ATC AAA AAT TAC AAG AAC CAC TTT CCT GAT ATC TTC 913  
 AGC AAA GCC TCT GAG TGC ATG CAG GTG ATC TTT GGC ATT GAT 955  
 GTG AAG GAA GTG GAC CCT GCC GGC CAC TCC TAC ATC CTT GTC 997  
 ACC TGC CTG GGC CTC TCC TAT GAT GGC CTG CTG GGT GAT GAT 1039  
 CAG AGT ACG CCC AAG ACC GGC CTC CTG ATA ATC GTC CTG GGC 1081  
 ATG ATC TTA ATG GAG GGC AGC CGC GCC CCG GAG GAG GCA ATC 1123  
 TGG GAA CCA TTG AGT GTG ATG GGG GCT GTA TGA 1156  
 TGGGAGGGAG CACAGTGTCT ATTGGAAGCT CAGGAAGCTG CTCACCCAAG 1206  
 AGTGGGTGCA GGAGAACTAC CTGGAGTACC GCCAGGCGCC CGGCAGTGAT 1256  
 CCTGTCCGCT ACGAGTTCTT CTGGGGTCCA AGGGCCCTTG CTGAAACCAG 1306  
 CTATGTGAAA GTCTGGAGC ATGTGGTCAG GGTCAATGCA AGAGTTCCGA 1356  
 TTTCCTACCC ATCCCTGCAT GAAGAGGCTT TGGGAGAGGA GAAAGGAGTT 1406  
 TGAGCAGGAG TTGCAGCTAG GGCCAGTGGG GCAGGTTGTG GGAGGGCCTG 1456  
 GGCCAGTGCA CGTTCAGGG CCACATCCAC CACTTCCCTT GCTCTGTTAC 1506  
 ATGAGGCCCA TTCTTCACTC TGTGTTTGAA GAGAGCAGTC ACAGTTCTCA 1556  
 GTAGTGGGGA GCATGTTGGG TGTGAGGGAA CACAGTGTGG ACCATCTCTC 1606  
 AGTTCTGTG CTATTGGGCG ATTTGGAGGT TTATCTTTGT TTCCTTTTGG 1656  
 AATTGTTCCA ATGTTCCCTC TAATGGATGG TGTAATGAAC TTCAACATTC 1706  
 ATTTTATGTA TGACAGTAGA CAGACTTACT GCTTTTATA TAGTTTAGGA 1756  
 GTAAGAGTCT TGCTTTTCAT TTATACTGGG AAACCCATGT TATTTCTTGA 1806  
 ATTC 1810

Fig. 12

16/16

SEQ ID NO. 7

ACCTGCTCCA GGACAAAGTG GACCCCACTG CATCAGCTCC ACCTACCCTA 50  
 CTGTCAGTCC TGGAGCCTTG GCCTCTGCCG GCTGCATCCT GAGGAGCCAT 100  
 CTCTCACTTC CTTCTTCAGG TTCTCAGGGG ACAGGGAGAG CAAGAGGTCA 150  
 AGAGCTGTGG GACACCACAG AGCAGCACTG AAGGAGAAGA CCTGTAAATT 200  
 GGCCTTTGTT AGAACCTCCA GGGTGTGGTT CTCAGCTGTG GCCACTTACA 250  
 CCTCCCTCT CTCCCCAGGC CTGTGGGTCC CCATCGCCCA AGTCCTGCCC 300  
 ACACTCCAC CTGCTACCCT GATCAGAGTC ATC 333  
 ATG CCT CGA GCT CCA AAG CGT CAG CGC TGC ATG CCT GAA GAA 375  
 GAT CTT CAA TCC CAA AGT GAG ACA CAG GGC CTC GAG GGT GCA 417  
 CAG GCT CCC CTG GCT GTG GAG GAG GAT GCT TCA TCA TCC ACT 459  
 TCC ACC AGC TCC TCT TTT CCA TCC TCT TTT CCC TCC TCC TCC 501  
 TCT TCC TCC TCC TCC TCC TGC TAT CCT CTA ATA CCA AGC ACC 543  
 CCA GAG GAG GTT TCT GCT GAT GAT GAG ACA CCA AAT CCT CCC 585  
 CAG AGT GCT CAG ATA GCC TGC TCC TCC CCC TCG GTC GTT GCT 627  
 TCC CTT CCA TTA GAT CAA TCT GAT GAG GGC TCC AGC AGC CAA 669  
 AAG GAG GAG AGT CCA AGC ACC CTA CAG GTC CTG CCA GAC AGT 711  
 GAG TCT TTA CCC AGA AGT GAG ATA GAT GAA AAG GTG ACT GAT 753  
 TTG GTG CAG TTT CTG CTC TTC AAG TAT CAA ATG AAG GAG CCG 795  
 ATC ACA AAG GCA GAA ATA CTG GAG AGT GTC ATA AAA AAT TAT 837  
 GAA GAC CAC TTC CCT TTG TTG TTT AGT GAA GCC TCC GAG TGC 879  
 ATG CTG CTG GTC TTT GGC ATT GAT GTA AAG GAA GTG GAT CC 920

Fig. 13

BEST AVAILABLE COPY